

### **REMARKS**

Claims 1-28, 38, 40-54, 57, 58, 68, 70-84, 87-89, 98, 100-114, and 117-119 are now pending in the application. Claims 59, 69, and 99 are cancelled without disclaimer or prejudice to the subject matter contained therein. Minor amendments have been made to the specification and claims to simply overcome the objections to the specification and rejections of the claims under 35 U.S.C. § 112. The amendments to the claims contained herein are not a narrowing amendment. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **CLAIM OBJECTIONS**

Claims 69 and 99 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant cancelled claims 69 and 99. As such, this objection is rendered moot.

### **REJECTION UNDER 35 U.S.C. § 101**

Claim 58 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. This rejection is respectfully traversed.

With respect to claim 58, the Examiner alleges that the generated product has no practical application because the generated product is never used as in claim 59. Applicant amended claim 58 to recite the subject matter of claim 59 (adding said product to a prior carrier frequency offset estimate to produce an adapted carrier frequency

offset estimate). Applicant respectfully submits that claim 58 is now directed to statutory subject matter.

#### **REJECTION UNDER 35 U.S.C. § 112**

Claims 1-8, 11, 13, 14-16, 17-23, 26, 28, 38, 40-45, 47-49, 58, 68-79, 88, 98-109, are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

The Examiner alleges that the claims are incomplete for omitting essential steps, such omission amounting to a gap between the steps. In particular, the Examiner alleges that the claims omit the step of calculating or estimating carrier frequency offset because the claims are directed to a method for estimating carrier frequency offset in OFDM. Applicant respectfully disagrees.

Applicant respectfully notes that all of the steps in a method do not have to be claimed to satisfy the requirements of § 112, second paragraph. MPEP § 2172.01 states that a “claim that omits subject matter **disclosed to be essential to the invention as described in the specification** or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling.” (Emphasis added). *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). In other words, essential matter is matter that is disclosed to be essential in the specification.

For example, in *Mayhew*, the Appellant alleged that employing a cooling zone was not essential to the invention. The Court noted that Appellant’s specification stated “[t]his is practical because of special cooling apparatus, specially located.” In other

words, the Appellant's claim omitted subject matter disclosed to be essential in the specification.

In contrast, Applicant's claim does not omit any steps disclosed to be essential in Applicant's specification. Limitations in the preamble do not have the alleged effect of defining essential steps. MPEP § 2111.02. Applicant respectfully submits that claims 1-8, 11, 13, 14-16, 17-23, 26, 28, 38, 40-45, 47-49, 58, 68-79, 88, and 98-109, are definite and should be allowable for at least the above reasons.

#### **REJECTION UNDER 35 U.S.C. § 102**

Claims 1, 11, 13, 14, 15, 26, and 28 are rejected under 35 U.S.C. § 102(e) as being anticipated by You et al. (U.S. Pat. No. 2003/0112743). This rejection is respectfully traversed.

The present application was filed on February 4, 2002 and claims the benefit of U.S. Provisional Application No. 60/273,487, filed March 5, 2001. The You reference was filed November 16, 2001. The present application antedates the alleged prior art reference. As such, the You reference is not a valid reference under 35 U.S.C. § 102(e) and should be disqualified.

Applicant respectfully submits that claims 1, 11, 13, 14, 15, 26, and 28, as well as their corresponding dependent claims, are allowable for at least these reasons.

#### **ALLOWABLE SUBJECT MATTER**

Claims 52-54, 57, 82-84, 87, 112-114, and 117-119 are allowed. The Examiner states that claim 17, 38, 44, 58, 68, 88, 98 would be allowable if rewritten in independent

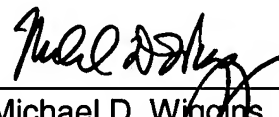
form. Applicant thanks the Examiner for the allowable subject matter. Applicant elects to defer amending these into independent form until after the above remarks are considered.

#### CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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